



HOOKER & HOLCOMBE, INC.  
Benefit Consultants and Actuaries

65 LaSalle Road | West Hartford, CT 06107-2397 | Founded in 1956

*Confidential*

April 20, 2012

Mr. Adam Cloud, Secretary  
City of Hartford Pension Commission  
Office of the Treasurer  
550 Main Street  
Hartford, CT 06103

***Re: 2011 MERF Actuarial Survey***

Dear Adam:

We are pleased to present the Annual Valuation of the City of Hartford Municipal Employees' Retirement Fund for 2011. Eleven additional copies are included for distribution. This report reflects the change in assumptions recommended with the 2005-2010 Experience Study.

A change from the Aggregate Funding Method to the Entry Age Normal Funding Method was made this year as a result of that study. We have shown the recommended contribution for the 2012-2013 fiscal year as a percentage of estimated payroll as in the past, as well as an alternative recommended dollar amount with this change in method.

*Recommended contribution rates are as follows:*

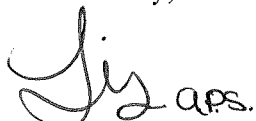
	<b>Recommended Fiscal Year 2012-2013 Contribution (2011 MERF Actuarial Survey)</b>		<b>Recommended Fiscal Year 2011-2012 Contribution (2010 MERF Actuarial Survey)</b>
	Dollar Amount (in millions)	% Of Payroll	% Of Payroll
Police	\$13.19	32.56%	17.91%
Firefighters	6.97	21.67%	11.30%
Board of Education	3.48	8.49%	14.42%
Municipal Services	11.47	43.92%	40.66%
Library	<u>1.02</u>	22.83%	24.03%
Total	36.13		

Page 2  
April 20, 2012  
Mr. Adam Cloud, Secretary  
***Re: 2011 MERF Actuarial Survey***

Please see Section I of the attached report for analysis and discussion regarding the changes in the contribution requirements from last year to this year, as well as expectations for future increases.

As always, I am available to answer any questions you or the Pension Commission may have.

Sincerely,

Handwritten signature of Elizabeth J. Churney in cursive script.

Elizabeth J. Churney

Handwritten signature of Ellen A. Kucenski in cursive script.

Ellen A. Kucenski

/mmh

Enclosure

Copy with enclosure: Donna P. Parker

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**City of Hartford  
Municipal  
Employees'  
Retirement Fund  
(MERF)**

Actuarial Survey

July 1, 2011

Elizabeth J. Churney, F.S.A.,  
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Consulting Actuary

Ellen A. Kucenski, F.S.A.,  
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Actuary

Scott B. Moss, A.S.A.  
Pension Analyst

April 20, 2012

## Table of Contents

Section		Page
I	Valuation Report	
	A. Purpose of the Valuation	1
	B. Contribution for 2012-2013 Fiscal Year	1
	C. Funded Status	2
	D. Plan Experience During Period Under Review	3
	E. Changes Since the Last Valuation	4
	F. Future Contribution Requirements	5
	G. Certification	6
II	Supporting Exhibits	
	A. Actuarial Accrued Liability	7
	B. Cash Contribution	8
	C. Actuarial Balance	9
	D. Development of Asset Values	10
	E. Accounting Information	13
	F. Membership Data	15
	G. IRC Section 415(m) Valuation	28
III	Actuarial Cost Methods and Assumptions	
	A. Actuarial Cost Methods	29
	B. Actuarial Assumptions	30
IV	Summary of Principal Pension Plan Provisions	37

## Section I

### Valuation Report

#### A. Purpose of the Valuation

The purpose of the valuation is to determine the funded status of the plan as well as the recommended cash contribution for the plan year. The information found in Section II of the report has been developed for this purpose.

The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings serve to reduce the cost of plan benefits and expenses. Thus,

<i>City's ultimate cost</i>	=	<i>benefits paid</i>	+	<i>expenses incurred</i>	-	<i>investment return</i>	-	<i>employee contributions</i>
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#### B. Contribution for 2012-2013 Fiscal Year

The City's recommended contribution for the 2012-2013 fiscal year, determined from the July 1, 2011 actuarial valuation, is shown below. A change from the Aggregate Funding Method to the Entry Age Normal Funding Method was made this year as a result of the 2005-2010 Experience Study. We have shown the recommended contribution for the 2012-2013 fiscal year as a percentage of estimated payroll as in the past, as well as an alternative recommended flat dollar amount with this change in method.

	Recommended 2012-2013 Fiscal Year Contribution (July 1, 2011 Valuation)		Recommended 2011-2012 Fiscal Year Contribution (July 1, 2010 Valuation)
	% of payroll	\$ in millions	% of payroll
Police	32.56%	\$13.19	17.91%
Firefighters	21.67%	\$6.97	11.30%
Board of Education	8.49%	\$3.48	14.42%
Municipal Services	43.92%	\$11.47	40.66%
Library	22.83%	<u>\$1.02</u>	24.03%
Total		36.13	

Please see Section II, Exhibit A for the development of these figures.

It is important to note that the recommended City contribution has historically been expressed as a percentage of the payroll for each of the five groups of employees covered by the plan: Police, Firefighters, Board of Education, Municipal Services, and Library. Each of those percentages has then been applied against the *estimated* payroll for each group for the next fiscal year, to yield an *estimated* dollar amount of the cash contribution required. Importantly, while the percentages of payroll did not change because they were actuarially determined, the dollar amount of the City's *actual* required contribution did change -- upward or downward -- depending on whether *actual* payrolls in the fiscal year were more, or less, than currently estimated. With the change in cost method this year, the City can consider an alternative approach in which the recommended contribution is determined as a flat dollar amount for the upcoming year or continue with this historical percent of payroll approach.

If the City continues with the historical approach of contributing a percent of payroll for the 2012-2013 fiscal year, the recommended contribution in millions may vary from the amounts shown in the chart above. The City's actual contribution will be determined by applying the percentages shown to the actual 2012-2013 payroll. The contribution may be higher or lower than the amounts shown here depending on final 2012-2013 payroll.

# Section I

## Valuation Report

(continued)

As can be seen, the contributions as a percentage of payroll have increased from last year for all groups except the Board of Education and Library. As a dollar amount, the estimated contribution for fiscal year 2011-2012 was \$28.5 million as shown in the July 1, 2010 valuation, determined based on a payroll estimate at that time of approximately \$145.2 million (obtained by projecting the payroll provided with the July 1, 2010 actuarial valuation to fiscal year 2011-2012 using the valuation's assumed rate of salary increase). The 2012-2013 fiscal year contribution represents an increase of approximately \$7.6 million over that figure to \$36.1 million.

As is true each year, the change in the recommended contribution requirement from last year to this year is the result of actual plan asset performance, as well as changes in liabilities caused by changes in the covered population and benefit provisions (where applicable). For this year, there is the added impact of the changes in assumptions and methods recommended as part of the 2005-2010 Experience Study. See Sections D and E to follow for more detail regarding this year's increase.

### C. Funded Status

The funded status of the plan as of July 1, 2011 is summarized below. The figures are prepared in accordance with the requirements of the Governmental Accounting Standards Board, or GASB, and are useful in accessing the health of the plan overall.

Specifically, the funded status is based on the smoothed (actuarial) value of assets used in the valuation, as well as a measure of the plan's liability known as the Actuarial Accrued Liability. The Actuarial Accrued Liability is the liability for benefits expected to be paid from the plan for inactive participants, as well as the liability for future expected benefit payments for active participants. For actives, the liability measure includes the impact of assumed future salary increases on projected benefits, but includes only that portion of their overall liability attributable to services rendered as of the valuation date.

	July 1, 2011
Actuarial Accrued Liability	\$1,218,900,000
Actuarial Value of Assets	<u>1,017,602,000</u>
Unfunded Status	201,298,000
Funded Percentage	83.5%

During the 2010-2011 fiscal year, the plan's funded status dropped from 88.6% as of July 1, 2010 to 83.5% as of July 1, 2011, as detailed above. Despite the fact that the City fully funded the recommended contribution for the year, asset growth did not keep pace with liability growth, resulting in the decline in the funded status. This is primarily the result of the asset losses on the smoothed (actuarial) value of assets discussed in Section D below. In addition, changes in assumptions adopted as part of the Experience Study contributed to the decrease in funded status. Prior to reflecting such changes, the funded percentage was 85.0% as of July 1, 2011 instead of the final 83.5%.

## Section I

### Valuation Report

(continued)

Even with a funded status of less than 100%, the plan is still in a healthy position with the ability to pay benefits due at the current 83.5% level. It is not the intent of the plan's funding method to fully fund such shortfalls in just one year. Absent other significant changes, such underfunding will be eliminated over a period of years as it is spread into future contribution requirements.

#### **D. Plan Experience During Period Under Review**

As discussed earlier, the recommended City contribution for the 2012-2013 fiscal year has increased from last year by approximately \$7.6 million, based on estimates of payroll. This increase is the net impact of annual plan asset and liability experience (approximately \$4.1 million of the increase) and changes in assumptions and methods recommended as part of the 2005-2010 Experience Study (approximately \$3.5 million of the increase).

##### *Annual Plan Experience*

Considering the impact of the Experience Study separately, the recommended contribution increased by approximately \$4.1 million from the estimated \$28.5 million for fiscal year 2011-2012 to \$32.6 million for fiscal year 2012-2013 prior to any changes in assumptions and methods. The primary reason for this increase in the recommended contribution is the continued recognition of the decline in the capital markets that occurred within the 2007-2008 and 2008-2009 fiscal years, with the resulting loss of market value of MERF assets during that period. The net impact of changes in the covered population partially offset this increase in contribution. Plan changes (specifically the 2011 Early Retirement Incentive Program) also contributed to the increase, but since they were limited in scope they were not a major driver.

The market value of assets increased from \$888.6 million to \$981.0 million, resulting in an asset return of approximately 17.7% over that period. In order to avoid dramatic fluctuations in contribution requirements with such large swings in the market, a "smoothed" or "actuarial" value of assets is used to perform the valuation. This smoothed value recognizes the difference between the expected return on the market value of assets and the actual return over a 5-year period at 20% per year.

As of July 1, 2011, the actuarial value of assets used in the development of the contribution requirement was approximately \$1,017.6 million, \$36.6 million higher than the market value of assets of \$981.0 million at such date. The return for the year on the actuarial value was 3.5% as opposed to the 17.7% return on the market value. Since this 3.5% is less than the MERF's 8% return assumption, asset losses were generated that increased the fiscal year 2012-2013 contribution requirement. Specifically, the recognition of these losses represented approximately an \$8.3 million increase in the contribution and were therefore the primary driver of the increase.

Changes in the plan's population and the resulting impact on plan liabilities had the net effect of decreasing the recommended city contribution by the remaining \$4.2 million. Considerable work was done to refine the valuation data this year, contributing to this decrease. Another key driver was the fact that there were more terminations than expected for the Board of Education and Municipal Services groups.

## Section I

### Valuation Report

(continued)

#### *Experience Study*

The net impact of the 2005-2010 Experience Study was to increase the recommended contribution for fiscal year 2012-2013 from \$32.6 million to \$36.1 million, a \$3.5 million increase. As a result of the study, a change in the funding method from the Aggregate Method to the Entry Age Normal Method with 15-year (level dollar) amortization period was adopted. In addition, there were demographic and economic assumption changes reflected for all groups.

As part of the assumption portion of the study, mortality, termination, rates of retirement, disability and salary increases were analyzed by group over the five-year period 2005-2010. These assumptions were then changed to better model expected plan experience, which served to increase plan liability. The net impact on the recommended contribution for fiscal year 2012-2013 was an increase of approximately \$5.1 million. See Section III, Actuarial Cost Methods and Assumptions for a detailed description of assumptions used in both the July 1, 2010 and July 1, 2011 valuations.

A plan's funding method is a mechanism for spreading the ultimate cost of benefits over the working career of the active population. With the change from the Aggregate Method to the Entry Age Normal Method using a level dollar 15-year amortization period, the recommended contribution for fiscal year 2012-2013 decreased by approximately \$1.6 million.

#### **E. Changes Since The Last Valuation**

As discussed above, the changes in assumptions and methods adopted as part of the 2005-2010 Experience Study are first reflected with the July 1, 2011 valuation.

Specific plan changes reflected in this valuation are as follows:

- 2011 Early Retirement Incentive Program
- Post January 1, 2011 hires in the non-union General Government plan have a reduced multiplier and change in Normal Retirement Date



## Section I

### Valuation Report

(continued)

#### F. Future Contribution Requirements

The use of a smoothed (actuarial) value of assets is meant to produce a more level funding pattern, given asset volatility. With a drop in the market, asset losses are spread over a five-year period, leveling out the recommended funding rather than providing for a spike in contribution requirements in one year. As of July 1, 2011, there were approximately \$36.6 million in net unrecognized asset losses that eventually need to be recognized in future City contribution requirements because of the use of this smoothing method. Given this level of unrecognized losses, future contribution increases can be expected for the 2013-2014 fiscal year, absent other significant changes.

To provide a sense of the level of expected future contributions, an estimate for the 2013-2014 fiscal year has been calculated. Specifically, the City's estimated recommended contribution for such fiscal year is currently \$44.3 million. This figure is based on a projected market value of assets at July 1, 2012 of \$1,000.0 million, determined by projecting assets as of July 1, 2011 to June 30, 2012 assuming an 8% return. Projected plan liabilities inherent in this calculation were based on the results of the July 1, 2011 valuation, including the assumptions, methods, and census data as of such date. The unfunded actuarial accrued liability was amortized over a 15 year period.

The projected asset value and estimated contribution for the 2013-2014 fiscal year assume the City funds the recommended contribution for 2011-2012. If the City contributes an amount other than the annual recommended contribution, the estimated future contribution will vary from the amount shown here.

The final 2013-2014 recommended contribution will be based upon final liabilities and assets as of July 1, 2012. To provide some sensitivity of the contribution to asset values, if the market value of assets as of July 1, 2012 is approximately \$100 million higher at \$1,100.0 million, the contribution estimate decreases by \$2.3 million to \$42.0 million.

Beginning with the 2014-2015 fiscal year contribution, the past asset losses of 2007-2009 will be fully recognized. Therefore, contribution increases are not expected to be as significant. The extent of any increase or decrease in contribution will depend on market returns after July 1, 2011, among other factors.

**Section I**  
**Valuation Report**  
(continued)

**G. Certification**

This report presents the results of the July 1, 2011 Actuarial Valuation for the City of Hartford Municipal Employees' Retirement Fund (MERF) (the Plan) for the purpose of estimating the funded status of the Plan and determining the Annual Required Contribution (ARC) for the fiscal year ending June 30, 2013. This report is intended to satisfy the requirements of Connecticut General Statute 7-450a and meet the requirements of Public Act No. 77-468, an Act Requiring Periodic Actuarial Valuation of Municipal Pension Plans.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

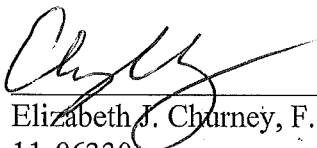
We certify that the actuarial assumptions and methods that were selected by us and represent our best estimate of anticipated actuarial experience under the Plan.

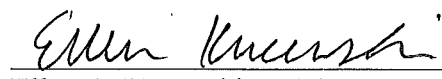
In preparing this valuation, we have relied on employee data and asset and contribution information provided by the Plan Sponsor. We have audited neither the employee data nor the financial information, although we have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

We are members of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

  
Elizabeth J. Churney, F.S.A., M.A.A.A.,  
11-06330

  
Ellen A. Kucenski, F.S.A., M.A.A.A.,  
11-07674

April 20, 2012

## Section II

### Supporting Exhibits

#### A. Entry Age Normal Actuarial Accrued Liability as of July 1, 2011

	Police	Firefighters	Board Of Education	Municipal Services	Library	Total Membership
A. Covered Payroll						
Annual Payroll (000)	\$36,839	\$29,886	\$41,017	\$24,749	\$4,064	\$136,555
B. Actuarial Accrued Liability (AAL)						
Entry Age Normal AAL (000)						
1. Active Members						
a. Active Members' MERF Liability	\$100,164	\$112,034	\$63,937	\$51,643	\$8,118	\$335,896
b. Local 566 Payment Present Value	0	0	3,601	0	0	
c. Local 1716 Payment Present Value	0	0	0	4,189	0	
d. Total for Active Members	100,164	112,034	67,538	55,832	8,118	343,686
2. Terminated Non-Vested Members [allocated by (1d)]	181	173	98	89	12	553,450
3. Terminated Vested Members	199	90	5,027	5,597	212	11,125
4. Retired Members	279,608	198,305	96,873	272,501	15,269	862,556
5. Old Plans Cola 1987/1990/1997/1999/2001/2005/2007	566	263	116	35	0	980
6. Total	380,719	310,864	169,652	334,054	23,611	1,218,900
C. Valuation Assets (Adjusted Value)						
1. Amount prior to Recognizing Receivable (000)	\$315,305	\$279,459	\$150,816	\$254,544	\$17,476	\$1,017,602
2. Contribution Receivable (000)	0	0	0	0	0	0
3. Valuation Assets after Recognition of Receivable (000)	315,305	279,459	150,816	254,544	17,476	1,017,602
D. Unfunded Actuarial Accrued Liability (000)	\$65,414	\$31,405	\$18,836	\$79,510	\$6,135	\$201,298
E. Funded Percent (C. / B.)	82.8%	89.9%	88.9%	76.2%	74.0%	83.5%

## Section II

### Supporting Exhibits (continued)

#### B. Cash Contributions

#### July 1, 2012 – June 30, 2013 Fiscal Year Contribution

	Police	Firefighters	Board Of Education	Municipal Services	Library	Total Membership
1. Development of Amortization						
a. Unfunded Actuarial Accrued Liability	\$65,413,424	\$31,405,172	\$18,835,878	\$79,509,402	\$6,134,722	\$201,298,598
b. Amortization of Unfunded AAL (15 year open)	7,076,130	3,397,270	2,037,581	8,600,970	663,627	21,775,577
2. Normal Cost Development						
a. Normal Cost Beginning of Year prior to Expense Load	\$4,576,876	\$2,523,655	\$1,184,184	\$2,072,974	\$249,683	\$10,607,372
b. Normal Cost Projected One Year prior to Expense Load	4,943,026	2,725,547	1,278,919	2,238,812	269,658	11,455,962
c. Expense Load (Allocated by AAL)	792,911	647,428	353,329	695,723	49,174	2,538,565
3. Fiscal Year Contribution for 07/01/2012 - 06/30/2013						
I. Gross City Contribution						
a. Total Contribution Due as of Beginning of Year (1b+2b+2c)	12,812,067	6,770,245	3,669,829	11,535,505	982,459	35,770,105
b. Total Interest Adjusted Gross City Contribution	13,314,691	7,035,845	3,813,798	11,988,048	1,021,001	37,173,383
II. Annual Adjusted Payroll as of 07/01/2011 w 2 year proj	40,892,548	32,462,687	44,937,391	27,295,947	4,472,670	150,061,243
III. Contribution as a % of Payroll prior to adjustments	32.56%	21.67%	8.49%	43.92%	22.83%	24.77%
IV. 07/01/2012 Payment for Local 566 (000)	0	0	303,918	0	0	303,918
V. 07/01/2012 Payment for Local 1716 (000)	0	0	0	509,126	0	509,126
VI. Old Plans COLA Annual Payment (000)	127,079	68,024	31,175	7,309	0	233,587
VII. Net City Contribution [(I.) - (IV.) - (V.) - (VI.)]	13,187,612	6,967,821	3,478,705	11,471,613	1,021,001	36,126,752

	2012 - 2013 Contribution Sensitivity*					
	Police	Firefighters	Board of Education	Municipal Services	Library	Total
Estimated 2012-2013 Fiscal Year Payroll +5%	\$42,937,175	\$34,085,821	\$47,184,261	\$28,660,744	\$4,696,304	\$157,564,305
Net City Contribution Estimate for 2012-2013	13,853,346	7,319,614	3,669,395	12,071,016	1,072,051	37,985,421
Estimated 2012-2013 Fiscal Year Payroll -5%	38,847,921	30,839,553	42,690,521	25,931,150	4,249,037	142,558,182
Net City Contribution Estimate for 2012-2013	12,521,877	6,616,029	3,288,015	10,872,211	969,951	34,268,084

\* Based on contribution policy of depositing a % of payroll using actual fiscal year payroll.

## Section II

### Supporting Exhibits (continued)

#### C. Actuarial Balance Sheet

	July 1, 2011*	July 1, 2010
<b>Actuarial Liabilities</b>		
Present Value of Future Benefits for:		
Active Employees	\$505,461,387	\$520,534,299
Inactive Members		
• Regular Retirees	773,799,245	745,301,637
• Disability Retirees	60,461,976	54,836,908
• Survivors	28,294,596	26,825,376
• Terminated Non-Vesteds	553,450	553,450
• Terminated Vesteds	11,125,238	14,783,544
• Old Plans COLA	<u>980,207</u>	<u>1,019,671</u>
<b>TOTAL</b>	<b>\$1,380,676,099</b>	<b>\$1,363,854,885</b>
<b>Source of Funds</b>		
1. Actuarial Value of Assets	\$1,017,601,546	\$1,041,572,175
2. Present Value of Future Employee Contributions	75,119,853	81,966,582
3. Present Value of Future City Normal Cost Contributions	86,656,102	240,316,128
4. Unfunded Accrued Liability*	<u>201,298,598</u>	<u>N/A</u>
5. TOTAL = (1) + (2) + (3) + (4)	<b>\$1,380,676,099</b>	<b>\$1,363,854,885</b>

\* Reflects change in cost method.

**Section II**  
**Supporting Exhibits**  
(continued)

**D. Development of Asset Values**

The Actuarial Value of assets is used in the determination of plan contributions. It phases in recognition of asset gains and losses. A method of smoothing is used because the Market Value can swing widely from one year to the next, resulting in undesirable fluctuations in pension contributions. The smoothing is accomplished by recognizing asset gains and losses over a five-year period at 20% per year.

Relationship of Actuarial Value to Market Value		
1. Market value 7/1/2011	\$	980,955,795
2. Gain / (loss) not recognized in actuarial value 7/1/2011		(36,645,751)
3. Preliminary actuarial value 7/1/2011: (1)-(2)		1,017,601,546
4. Preliminary actuarial value as a percentage of market value: (3)÷(1)		103.7%
5. Gain / (loss) recognized for corridor min/max		N/A
6. Actuarial value 7/1/2011 after corridor min/max: (3)+(5)		1,017,601,546
7. Actuarial value as a percentage of market value: (6)÷(1)		103.7%

Development of Asset Gain / (Loss) for 2010-2011 Plan Year		
1. Market value 7/1/2010	\$	888,582,990
2. Contributions		32,448,165
3. Benefit payments		89,089,425
4. Administrative expenses		2,907,663
5. Expected return at 8.00%		68,770,076
6. Expected value 7/1/2011: (1)+(2)-(3)-(4)+(5)		897,804,143
7. Market value 7/1/2011		980,955,795
8. Asset gain / (loss) for -1 Plan Year: (7)-(6)		83,151,652

Recognition of Gain / (Loss) in Actuarial Value					
Year	(a) Gain / (loss)	(b) Recognized as of 7/1/2010	(c) Recognized in current year: 20% of (a)	(d) Total recognized as of 7/1/2011: (b)+(c)	(e) Not recognized as of 7/1/2011: (a)-(d)
2006-2007	\$ 77,566,647	\$ 62,053,316	\$ 15,513,331	\$ 77,566,647	\$ 0
2007-2008	(111,496,189)	(66,897,714)	(22,299,238)	(89,196,952)	(22,299,237)
2008-2009	(241,203,873)	(96,481,550)	(48,240,775)	(144,722,325)	(96,481,548)
2009-2010	26,022,852	5,204,570	5,204,570	10,409,140	15,613,712
2010-2011	83,151,652	0	16,630,330	16,630,330	66,521,322
Total			(33,191,782)		(36,645,751)

## Section II

### Supporting Exhibits (continued)

#### D. Development of Asset Values

Summary of Fund Activity		
	Market Value	Actuarial Value
<b>1. Beginning value 7/1/2010</b>		
a. Trust assets	\$ 888,582,990	\$ 1,041,572,175
b. Accrued contribution	0	0
c. Benefits payable	0	0
d. Administrative expenses payable	0	0
e. Net: (a)+(b)-(c)-(d)	888,582,990	1,041,572,175
<b>2. Contributions</b>		
a. Contributions during year	32,448,165	32,448,165
b. Change in accrued contribution	0	0
c. Total for plan year	32,448,165	32,448,165
<b>3. Disbursements</b>		
a. Benefit payments during year	89,089,425	89,089,425
b. Administrative expenses during year	2,907,663	2,907,663
c. Change in benefits payable	0	0
d. Change in administrative expenses payable	0	0
e. Total for plan year	91,997,088	91,997,088
<b>4. Net investment return</b>		
a. Interest and dividends	14,900,902	N/A
b. Change in accrued income	0	N/A
c. Realized gain (loss)	28,688,103	N/A
d. Unrealized gain (loss)	112,278,985	N/A
e. Expected return	N/A	68,770,076
f. Recognized gain (loss)	N/A	(33,191,782)
g. Required adjustment due to corridor	N/A	0
h. Reversal of prior year required adjustment	N/A	0
i. Investment-related expenses	(3,946,262)	N/A
j. Total	151,921,728	35,578,294
<b>5. Ending value 7/1/2011</b>		
a. Trust assets: (1a)+(2a)-(3a)-(3b)+(4j)	980,955,795	1,017,601,546
b. Accrued contribution	0	0
c. Benefits payable	0	0
d. Administrative expenses payable	0	0
e. Net: (a)+(b)-(c)-(d)	980,955,795	1,017,601,546
<b>6. Approximate rate of return 2010-2011</b>	17.7%	3.5%

**Section II**  
**Supporting Exhibits**  
(continued)

**D. Development of Asset Values**

Rate of Return on Market Value of Assets				
Period Ending June 30	Average Annual Effective Rate of Return			
	1 Year	3 Years	5 Years	10 Years
2002	-3.1%	1.1%	6.1%	N/A
2003	4.6%	-0.3%	3.6%	8.7%
2004	14.6%	5.1%	4.3%	9.9%
2005	9.1%	9.4%	4.4%	9.3%
2006	8.7%	10.8%	6.6%	8.7%
2007	15.6%	11.1%	10.4%	8.3%
2008	-1.9%	7.2%	9.0%	6.3%
2009	-15.0%	-1.2%	2.7%	3.5%
2010	11.1%	-2.5%	3.1%	3.7%
2011	17.7%	3.6%	4.7%	5.7%



## Section II

### Supporting Exhibits (continued)

#### E. Accounting Information

##### GASB Statements No. 25 and 27

The following information is based on the Governmental Accounting Standards Board (GASB) Statement No. 25 on "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans" and Statement No. 27 on "Accounting for Pensions by State and Local Governmental Employers". It represents a summary of information detailed further within the MERF's annual GASB report. The exhibits are provided for information purposes only here.

In reviewing the following exhibit regarding employer contributions, it is important to note that for the fiscal years ending 2007 through 2011, the City contributed more than the recommended Annual Required Contribution (ARC). This is due to a catch up period in which the City has been making contributions for prior fiscal years in which there was a shortfall in the amount contributed. The footnotes below provide further detail.

##### Schedule of Employer Contributions

Year Ended June 30	Annual Required Contribution	Percentage Contributed	Actual Contribution Received by MERF	Miscellaneous *
2005**	9,336,898	99%	9,000,000	206,742
2006**	17,033,102	70%	11,765,350	183,037
2007	14,328,866	115%	16,317,266***	163,749
2008	13,252,745	125%	16,454,745	129,258
2009	11,797,419	109%	12,713,915****	115,067
2010	9,601,580	113%	10,727,385	112,662
2011	18,846,217	100%	18,730,668	115,549

\* Funds transferred from State of Connecticut's Connecticut Municipal Employees' Retirement System (CMERS) and Aetna annuity payments.

\*\* Revised.

\*\*\* 2006-2007 fiscal year contribution includes contributions paid for prior fiscal years during the 2006-2007 fiscal year as follows: FY 00-01 \$117,500, FY 02-03 \$2,198, FY 03-04 \$180,876, FY 04-05 \$130,156, FY 05-06 \$5,084,715. After the June 30, 2006 GASB reporting period closed, two contributions of \$1,572,500 and \$1,490,242 were made to the Plan for the 2006-2007 fiscal year. These amounts are not included in the \$16,317,266 fiscal year 2006-2007 contribution listed above. They will be included in the 2007-2008 fiscal year contributions listed in the June 30, 2008 GASB report.

\*\*\*\* Contribution includes \$1,031,484 in contributions paid for the prior fiscal year (2007/2008) after the 06/30/2008 reporting period closed.

## Section II

### Supporting Exhibits (continued)

#### E. Accounting Information

As detailed below, the plan's funded status dropped from 88.6% as of July 1, 2010 to 83.5% as of July 1, 2011. Despite the fact that the City fully funded the recommended contribution for the year, asset growth did not keep pace with liability growth, resulting in the decline in the funded status. This is primarily the result of the asset losses on the Actuarial Value of Assets during the year previously discussed. In addition, changes in assumptions adopted as part of the Experience Study contributed to the decrease in funded status. Prior to reflecting such changes, the funded percentage was 85.0% as of July 1, 2011 instead of the final 83.5%.

Even with a funded status of less than 100%, the plan is still in a healthy position at the current 83.5% level with the ability to pay benefits due.

**Schedule of Funding Progress**

Actuarial Valuation Date	Actuarial Value of Assets * (a)	Actuarial Accrued Liability (AAL) ** (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a÷b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)÷c)
7/1/2005	986,405,000	970,286,000	(16,119,000)	101.7%	117,261,000	-13.7%
7/1/2006	1,021,491,000***	1,002,848,000	(18,643,000)	101.9%	124,837,000	-14.9%
7/1/2007	1,092,128,000***	1,090,715,000	(1,413,000)	100.1%	133,280,000	-1.1%
7/1/2008	1,123,379,000	1,099,441,000	(23,938,000)	102.2%	139,243,000	-17.2%
7/1/2009	1,089,184,000	1,126,965,000	37,781,000	96.6%	134,143,000	28.2%
7/1/2010	1,041,572,000	1,175,040,000	133,468,000	88.6%	132,529,000	100.7%
7/1/2011	1,017,602,000	1,218,900,000	201,298,000	83.5%	136,555,000	147.4%

\* Excludes receivable from CMERS (applicable for 7/1/2005 only; no longer applicable 7/1/2006+).

\*\* Liability shown determined using the projected unit credit cost method 7/1/2005-7/1/2006 and the entry age normal cost method starting 7/1/2007.

\*\*\*Excludes estimated City contribution receivable of \$5,463,745 as of July 1, 2007 and \$7,022,224 as of July 1, 2006. These receivable amounts were fully paid by the City as of July 1, 2008.

## Section II

### Supporting Exhibits (continued)

#### F. Membership Data

##### Summary – Active Members as of July 1, 2011

	Number	Payroll*	Average Annual Pay*
Police	480	\$36,839,151	\$76,748
Firefighters	365	29,885,531	81,878
Board of Education	905	41,017,098	45,323
Municipal Services	435	24,749,251	56,895
Library	66	4,064,438	61,582
<b>Total</b>	<b>2,251</b>	<b>\$136,555,469</b>	<b>\$60,664</b>

\*Basic salary, plus overtime, plus Fire private duty pay.

##### Summary – Pensioners as of July 1, 2011

	Service Pensions*		Disability Pensions		Survivor Benefits*		Total	
	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities
Police	512	\$1,970,675	70	\$202,667	79	\$88,737	661	\$2,262,079
Firefighters	337	1,298,276	125	379,675	111	121,275	573	1,799,226
Board of Ed.	626	881,254	23	15,115	52	21,414	701	917,783
Municipal Svcs.	811	2,259,905	12	11,023	87	62,198	910	2,333,126
Library	70	138,170	1	1,867	4	2,673	75	142,710
Vested Deferred	126	142,403	--	--	--	--	126	142,403
<b>TOTAL**</b>	<b>2,482</b>	<b>\$6,690,683</b>	<b>231</b>	<b>\$610,347</b>	<b>333</b>	<b>\$296,297</b>	<b>3,046</b>	<b>\$7,597,327</b>

\* 25 pensioners receiving benefits as retirees and as survivors are included in both groups.

\*\* Additional monthly benefits for the July 1, 1987, July 1, 1990, July 1, 1997, July 1, 1999, July 1, 2001, July 1, 2005, and July 1, 2007 COLA's for the unfunded plans (PBF, FRF, and RAF) are also included in the total liabilities for MERF. Such participants are not included in the counts shown here.

**Section II**  
**Supporting Exhibits**  
(continued)

**F. Membership Data**

**Data Reconciliation – Police**

<b>Participant Data</b>				
	<b>Active</b>	<b>Terminated Vested</b>	<b>Pensioners*</b>	<b>Total</b>
<b>Total Participants 7/1/2010</b>	<b>465</b>	<b>4</b>	<b>626</b>	<b>1,095</b>
Adjustments	0	-1	0	-1
Retirements	-6	-2	+8	0
Disabilities	-2	0	+2	0
Terminations				
Vested	0	0	N/A	0
Non-vested	-12	N/A	N/A	-12
Deaths	0	0	-12	-12
New beneficiaries	N/A	0	+17	+17
Transfer group	+6	0	+21	+27
Rehires	+1	0	-1	0
New entrants	<u>+28</u>	<u>N/A</u>	<u>N/A</u>	<u>+28</u>
<b>Total Participants 7/1/2011</b>	<b>480</b>	<b>1</b>	<b>661</b>	<b>1,142</b>
<b>Average Age</b>				
7/1/2010	37.3			
7/1/2011	38.1			
<b>Average Service</b>				
7/1/2010	9.0			
7/1/2011	9.6			
<b>Payroll**</b>				
7/1/2010	\$33,800,796			
7/1/2011	36,839,151			
<b>Total monthly benefits*</b>				
7/1/2010		\$9,291	\$2,197,163	
7/1/2011		1,847	2,262,079	

\* Excludes old plan COLA participants.

\*\* Basic salary plus overtime and private duty pay.

## Section II

### Supporting Exhibits (continued)

#### F. Membership Data

##### Data Reconciliation – Firefighters

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
<b>Total Participants 7/1/2010</b>	<b>359</b>	<b>3</b>	<b>545</b>	<b>907</b>
Adjustments	0	-2	0	-2
Retirements	-20	0	+20	0
Disabilities	-2	0	+2	0
Terminations				
Vested	0	0	N/A	0
Non-vested	-2	N/A	N/A	-2
Deaths	0	0	-19	-19
New beneficiaries	N/A	0	+13	+13
Transfer group	+2	0	+12	+14
Rehires	0	0	0	0
New entrants	<u>+28</u>	<u>N/A</u>	<u>N/A</u>	<u>+28</u>
<b>Total Participants 7/1/2011</b>	<b>365</b>	<b>1</b>	<b>573</b>	<b>939</b>
<b>Average Age</b>				
7/1/2010	41.8			
7/1/2011	40.9			
<b>Average Service</b>				
7/1/2010	14.6			
7/1/2011	13.6			
<b>Payroll**</b>				
7/1/2010	\$28,697,917			
7/1/2011	29,885,531			
<b>Total monthly benefits*</b>				
7/1/2010		\$7,589	\$1,679,577	
7/1/2011		841	1,799,226	

\* Excludes old plan COLA participants.

\*\* Basic salary plus overtime and private duty pay.

## Section II

### Supporting Exhibits (continued)

#### F. Membership Data

##### Data Reconciliation – Board of Education

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
<b>Total Participants 7/1/2010</b>	<b>895</b>	<b>112</b>	<b>715</b>	<b>1,722</b>
Adjustments	-3	-43	0	-46
Retirements	-19	-13	+32	0
Disabilities	-1	0	+1	0
Terminations				
Vested	-13	+13	N/A	0
Non-vested	-28	N/A	N/A	-28
Deaths	0	-1	-19	-20
New beneficiaries	N/A	0	+3	+3
Transfer group	-7	-1	-31	-39
Rehires	0	0	0	0
New entrants	<u>+81</u>	<u>N/A</u>	<u>N/A</u>	<u>+81</u>
<b>Total Participants 7/1/2011</b>	<b>905</b>	<b>67</b>	<b>701</b>	<b>1,673</b>
<b>Average Age</b>				
7/1/2010	47.0			
7/1/2011	47.0			
<b>Average Service</b>				
7/1/2010	11.1			
7/1/2011	10.1			
<b>Payroll**</b>				
7/1/2010	\$38,678,961			
7/1/2011	41,017,098			
<b>Total monthly benefits*</b>				
7/1/2010		\$107,838	\$928,785	
7/1/2011		70,872	917,783	

\* Excludes old plan COLA participants.

\*\* Basic salary plus overtime and private duty pay.

## Section II

### Supporting Exhibits (continued)

#### F. Membership Data

##### Data Reconciliation – Municipal Services

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
<b>Total Participants 7/1/2010</b>	<b>456</b>	<b>66</b>	<b>863</b>	<b>1,385</b>
Adjustments	0	-5	-1	-6
Retirements	-56	-11	+67	0
Disabilities	0	0	0	0
Terminations				
Vested	-4	+4	N/A	0
Non-vested	-18	N/A	N/A	-18
Deaths	0	0	-22	-22
New beneficiaries	N/A	0	+17	+17
Transfer group	-4	0	-10	-14
Rehires	+4	0	-4	0
New entrants	<u>+57</u>	<u>N/A</u>	<u>N/A</u>	<u>+57</u>
<b>Total Participants 7/1/2011</b>	<b>435</b>	<b>54</b>	<b>910</b>	<b>1,399</b>
<b>Average Age</b>				
7/1/2010	49.1			
7/1/2011	47.9			
<b>Average Service</b>				
7/1/2010	11.5			
7/1/2011	10.3			
<b>Payroll**</b>				
7/1/2010	\$27,011,021			
7/1/2011	24,749,251			
<b>Total monthly benefits*</b>				
7/1/2010		\$92,100	\$2,164,194	
7/1/2011		66,608	2,333,126	

\* Excludes old plan COLA participants.

\*\* Basic salary plus overtime and private duty pay.

**Section II**  
**Supporting Exhibits**  
(continued)

**F. Membership Data**

**Data Reconciliation – Library**

<b>Participant Data</b>				
	<b>Active</b>	<b>Terminated Vested</b>	<b>Pensioners*</b>	<b>Total</b>
<b>Total Participants 7/1/2010</b>	<b>71</b>	<b>4</b>	<b>59</b>	<b>134</b>
Adjustments	0	0	0	0
Retirements	-6	0	+6	0
Disabilities	0	0	0	0
Terminations				
Vested	0	0	N/A	0
Non-vested	-4	N/A	N/A	-4
Deaths	0	0	-1	-1
New beneficiaries	N/A	0	0	0
Transfer group	0	-1	+11	+10
Rehires	0	0	0	0
New entrants	<u>+5</u>	<u>N/A</u>	<u>N/A</u>	<u>+5</u>
<b>Total Participants 7/1/2011</b>	<b>66</b>	<b>3</b>	<b>75</b>	<b>144</b>
<b>Average Age</b>				
7/1/2010	46.9			
7/1/2011	47.1			
<b>Average Service</b>				
7/1/2010	12.8			
7/1/2011	12.0			
<b>Payroll**</b>				
7/1/2010	\$4,340,770			
7/1/2011	4,064,438			
<b>Total monthly benefits*</b>				
7/1/2010		\$3,080	\$123,770	
7/1/2011		2,235	142,710	

*\*Excludes old Plan COLA participants.*

*\*\*Basic salary plus overtime and private duty pay.*



## Section II

### Supporting Exhibits (continued)

#### F. Membership Data

##### Data Reconciliation – Total

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
<b>Total Participants 7/1/2010</b>	<b>2,246</b>	<b>189</b>	<b>2,808</b>	<b>5,243</b>
Adjustments	-3	-51	-1	-55
Retirements	-107	-26	+133	0
Disabilities	-5	0	+5	0
Terminations				
Vested	-17	+17	N/A	0
Non-vested	-64	N/A	N/A	-64
Deaths	0	-1	-73	-74
New beneficiaries	N/A	0	+50	+50
Transfer group	-3	-2	+3	-2
Rehires	+5	0	-5	0
New entrants	<u>+199</u>	<u>N/A</u>	<u>N/A</u>	<u>+199</u>
<b>Total Participants 7/1/2011</b>	<b>2,251</b>	<b>126</b>	<b>2,920</b>	<b>5,297</b>
<b>Payroll**</b>				
7/1/2010	\$132,529,465			
7/1/2011	136,555,469			
<b>Total monthly benefits</b>				
7/1/2010		\$219,898	\$7,093,489	
7/1/2011		142,403	7,454,925	

\*Excludes old Plan COLA participants.

\*\*Basic salary plus overtime and private duty pay.

City of Hartford MERF - Police

Number of Persons/Average Salary in Processing Group by Age and Years of Service

July 1, 2011

Attained Age	Completed Years of Credited Service														40 and over		All years	
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	3	45,379	10	63,480	1	62,159											14	59,507
25 to 29	11	43,371	52	64,864	18	81,763	2	83,058									83	66,119
30 to 34	7	44,318	27	65,029	41	86,953	11	88,338	1	82,500							87	76,843
35 to 39	4	41,152	16	63,026	33	85,255	19	90,900	17	108,700	1	112,915					90	85,270
40 to 44	2	40,889	13	67,385	23	87,579	25	90,151	47	105,225	12	104,905					122	93,691
45 to 49	1	40,798	7	61,172	7	75,685	6	88,050	18	96,451	8	100,870	1	106,004			48	87,004
50 to 54			3	54,679	5	77,624	2	86,633	4	84,131	9	75,753					23	75,814
55 to 59							1	77,237	3	89,893			4	67,338			8	77,034
60 to 64							1	39,792							1	70,526	2	102,876
65 to 69													1	86,219			1	86,219
70 & over																		
All ages	28	43,237	128	64,376	128	84,724	67	88,617	90	102,425	30	95,351	6	76,929	1	70,526	2	102,876

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

Completed Years of Credited Service

Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	10	48,175	14	64,627																24	57,772	
25 to 29	10	48,695	21	62,294	1	78,319														32	58,545	
30 to 34	4	48,490	22	62,075	8	84,679	10	78,947												44	68,784	
35 to 39	4	47,260	11	61,378	7	79,218	25	78,874	17	84,750	1	60,873								65	75,265	
40 to 44			2	71,872	5	82,330	16	82,066	20	86,739	12	87,577			1	83,078				56	84,594	
45 to 49			3	60,722	3	83,728	10	79,225	28	86,348	27	88,465	10	88,666						81	85,414	
50 to 54			1	84,214			5	77,867	9	84,131	20	91,028	7	82,508	8	102,081				50	88,910	
55 to 59							1	76,608	2	81,417	4	84,189	1	79,756	2	84,627			1	94,542	11	83,613
60 to 64													1	83,078	1	76,608				2	79,843	
65 to 69																						
70 & over																						
All ages	28	48,275	74	63,025	24	82,213	67	79,591	76	85,701	64	88,401	19	85,634	12	95,465			1	99,475	365	

City of Hartford MERF - Board of Education

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2011

Completed Years of Credited Service																						
Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	7	44,659																			7	44,659
25 to 29	9	44,829	25	43,577	15	38,673	1	30,569													50	42,071
30 to 34	20	52,134	35	52,156	31	41,823	12	38,686													98	47,233
35 to 39	11	48,233	27	53,591	28	57,564	31	43,323	5	45,938											102	50,608
40 to 44	12	50,452	18	51,331	32	47,318	40	51,873	18	50,266	7	43,010			1	64,173					128	49,910
45 to 49	6	49,488	29	51,444	31	49,652	51	46,196	13	47,612	15	49,705	2	48,033							147	48,603
50 to 54	4	54,975	23	46,010	30	47,082	33	40,234	21	45,373	11	45,142	6	50,508	4	57,699		1	73,499	133	45,677	
55 to 59	5	58,082	10	43,215	27	42,298	30	40,897	21	49,265	14	41,517	6	55,061	4	53,071	2	40,475		119	44,798	
60 to 64	3	83,426	9	50,422	19	37,579	19	49,828	11	45,803	10	48,153	8	60,122	3	43,587	1	37,334	3	39,849	86	47,893
65 to 69	2	50,157	4	61,802	10	55,278	6	48,643	5	48,495	3	50,143								30	52,835	
70 & over					2	28,414	1	30,392					1	38,950			1	34,651			5	32,164
All ages	79	51,298	180	49,828	225	46,311	224	45,055	94	47,736	60	45,940	23	54,322	12	53,168	4	38,234	4	48,262	905	

City of Hartford MERF - Municipal Services

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2011

Completed Years of Credited Service																						
Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	8	31,384	7	37,100	1	11,231															16	32,625
25 to 29	9	56,402	8	46,939	4	55,946															21	52,710
30 to 34	9	57,149	9	62,374	10	49,301	3	63,818	1	68,449	1	44,214									33	56,752
35 to 39	4	69,029	15	69,388	14	58,901	3	80,742			2	76,360									38	66,750
40 to 44	2	97,993	17	74,995	15	66,731	6	61,822	3	69,947	6	72,358			2	52,439					51	70,425
45 to 49	4	89,887	17	69,246	17	63,060	10	29,901	7	43,569	9	44,277	3	65,205			4	60,705	3	60,649	74	57,184
50 to 54	5	76,765	11	69,682	29	71,964	10	42,923	6	74,388	8	65,202	6	79,857	4	83,157					79	68,940
55 to 59	3	74,927	11	78,630	17	66,152	12	46,372	10	60,915	6	39,300	6	68,307			1	64,410	1	45,960	67	61,730
60 to 64	2	98,640	5	75,772	9	44,206	7	41,202	3	48,298	1	10,647	1	67,257	3	42,688	1	10,647	1	58,477	33	50,982
65 to 69			2	49,875	4	59,493	3	29,405	1	10,647	2	45,026	1	60,814							13	45,189
70 & over					3	10,647	2	10,647	4	10,647							1	10,647			10	10,647
All ages	46	63,273	102	66,662	123	61,016	56	44,415	35	52,482	35	53,934	17	71,333	9	62,841	7	46,932	5	57,277	435	

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2011

Completed Years of Credited Service																							
Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years		
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	
Under 25																							
25 to 29			1	55,698	1	56,196	1	51,060															
30 to 34	1	58,305			2	52,512	1	50,278	1	54,823											3	54,318	
35 to 39			1	46,420	3	54,562	1	51,630	1	49,443											5	53,686	
40 to 44					6	58,848	1	49,288	1	53,013	3	57,346	1	58,694							6	51,863	
45 to 49			1	116,257	4	60,497	2	98,446	2	75,559	3	50,375									12	57,177	
50 to 54	2	50,462	2	76,759	4	61,979					3	64,862	2	58,902							12	71,448	
55 to 59			2	151,220	5	76,175							1	60,939							13	62,673	
60 to 64	1	60,939			2	49,646					2	84,224			1	48,772				8	93,032		
65 to 69													1	48,772						6	62,909		
70 & over																				1	48,772		
All ages	4	55,042	7	96,333	27	61,039	6	66,525	5	61,679	11	62,382	5	57,242	1	48,772						66	

## Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

Completed Years of Credited Service

Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	28	42,199	31	58,041	2	36,695															61	50,069
25 to 29	39	48,080	107	57,960	39	61,799	4	61,936													189	56,797
30 to 34	41	51,696	93	59,228	92	66,707	37	66,680		3	68,591	1	44,214								267	61,730
35 to 39	23	50,449	70	60,254	85	70,212	79	67,542	40	89,194	4	81,627									301	68,360
40 to 44	16	55,199	50	63,263	81	65,360	88	68,886	89	88,180	40	80,426	1	58,694	4	63,032					369	72,595
45 to 49	11	63,389	57	59,573	62	58,616	79	53,170	68	76,896	62	72,431	16	80,271			4	60,705			362	64,552
50 to 54	11	64,059	40	55,599	68	60,536	50	46,391	40	62,322	51	72,841	21	70,360	16	86,254			1	73,499	298	62,114
55 to 59	8	64,399	23	69,544	49	54,031	44	44,027	36	57,673	24	48,075	18	63,897	6	63,589	3	48,453	2	70,251	213	55,150
60 to 64	6	84,749	14	58,903	30	41,821	27	47,220	14	46,338	13	50,817	10	63,131	9	50,526	2	23,991	6	56,487	131	50,676
65 to 69	2	50,157	6	57,826	14	56,482	9	42,230	6	42,187	5	48,096	3	65,268							45	51,278
70 & over					5	17,754	3	17,229	4	10,647			1	38,950			2	22,649			15	17,820
All ages	185	52,679	491	59,635	527	61,471	420	57,812	300	74,547	200	69,241	70	69,097	35	70,528	11	43,769	12	61,671	2,251	

## Section II

### Supporting Exhibits

(continued)

#### G. IRC Section 415(m) Valuation

The IRC Section 415(m) Fund\* is an unfunded "excess benefit plan" to provide that portion of certain retirees' pension benefits that exceed the limits permitted under Section 415 of the Federal Internal Revenue Code (IRC).

	<u>July 1, 2011</u>	<u>July 1, 2010</u>
1. Number of retirees and beneficiaries receiving benefits	11	6
2. Annual benefits payable	\$130,000	\$ 56,000
3. Present value of benefits	\$521,000	\$180,000

The "actives" are funded through MERF. The City provides contributions for the retirees' benefits payable each year, as determined by the Pension Commission.

#### Actuarial Assumptions

The actuarial assumptions used in the 2011 Section 415(m) Fund valuation are as follows:

Mortality Basis:	RP-2000 Healthy Annuitants Table projected by Scale AA to valuation date with no adjustment and separate male and female rates.
Mortality Improvement:	Projected to date of decrement using Scale AA (generational mortality).
	Prior Valuation: Projected 8 years using Scale AA.
Termination:	N/A.
Salary Scale:	N/A.
Investment Return:	8.00% per year, net of investment expenses.
Assumed Retirement age:	Immediate as all are retired.
Increases in dollar limit on benefits under IRC Section 415:	3% per year.

#### Benefits

Retiree pension amounts in excess of IRC Section 415 limits. Benefits which do not exceed such amounts are payable from the City's MERF Plan. IRC Section 415 limits are assumed to increase annually and thus decrease the benefits payable from this Plan and increase the portion of the benefits payable from the City's MERF Plan.

*\*Section 415(m) Fund adopted by the Court of Common Council on March 24, 1997.*



## **Section III**

### **Actuarial Cost Methods and Assumptions**

#### **A. Actuarial Cost Methods**

##### **Asset Valuation Method – Actuarial Value of Assets**

In order to smooth the year-to-year fluctuations in asset values, the asset values are adjusted by phasing in recognition of gains and losses over a five-year period. (Phase-in started July 1, 2003). Gains and losses are defined as the difference between the actual and the expected return on assets.

The July 1, 2009 valuation reflected a change in the asset valuation method from the use of a four-year smoothing period for gains and losses to the use of a five-year period. In the year of implementation of the change, the five-year smoothing methodology was retroactively applied to the gains and losses for previous years.

The assets held by the insurance companies include the funds on deposit for future purchase of annuities, as well as the reserves and contingency reserves for annuities already purchased which are subject to experience rating.

##### **Actuarial Funding Method**

The “Entry Age Normal Actuarial Cost Method” is used to determine plan liabilities. The Unfunded Actuarial Accrued Liability is amortized over 15 years using a level dollar, open period.

Since the MERF fund includes several classifications of members who have different provisions for benefits and contributions, it was necessary to apply this method by separate actuarial valuations for Police, Firefighters, Board of Education, Municipal Services, and Library participants.

This method was first used with the July 1, 2011 valuation. Previously the Aggregate Funding Method was used.

## Section III

### Actuarial Cost Methods and Assumptions

(continued)

#### B. Actuarial Assumptions

The actuarial assumptions used in the 2011 MERF valuation are as follows:

**Mortality Basis:**

For Police, Fire, Board of Education Corridor Supervisors and Building and Grounds Supervisors:

- Pre-retirement: RP2000 Employees Table – male and female rates, projected by Scale AA to valuation date with occupational (i.e., non-office worker, blue collar) adjustment.
- Post-retirement: RP2000 Healthy Annuitants Table – male and female rates, projected by Scale AA to valuation date with occupational (i.e., non-office worker, blue collar) adjustment. No adjustment reflected for assumed future beneficiaries.
- Disability: RP2000 Disabled Table – male and female rates.

For All Other Groups:

- Pre-retirement: RP2000 Employees Table – male and female rates, projected by Scale AA to valuation date with no adjustment.
- Post-retirement: RP2000 Healthy Annuitants Table – male and female rates, projected by Scale AA to valuation date with no adjustment.
- Disability: RP2000 Disabled Table – male and female rates.

**Mortality Improvement:**

Pre and Post-retirement: Projected to date of decrement using Scale AA (generational mortality)

Disability: None

**Prior Valuation:**

- Pre-retirement: Projected 17 years by Scale AA
- Post-retirement: Projected 8 years by Scale AA.
- Disability: None

### Section III

#### Actuarial Cost Methods and Assumptions

(continued)

Termination:

##### Yearly Rates of Employee Termination

<u>Age</u>	<u>Police</u>	<u>Fire</u>
20-24	4.0%	1.0%
25-29	3.0%	1.0%
30-34	2.5%	1.0%
35-39	2.0%	1.0%
40-44	1.0%	0.5%
45+	0.0%	0.0%

##### Yearly Rates of Employee Termination – Bd of Ed

<u>Age</u>	<u>Years of Service</u>					
	<1	1	2	3	4	5+
20-29	30.0%	30.0%	28.0%	25.0%	20.0%	15.0%
30-39	25.0%	25.0%	20.0%	18.0%	15.0%	9.0%
40-49	20.0%	17.0%	15.0%	12.0%	10.0%	8.0%
50-54	17.0%	15.0%	12.0%	10.0%	8.0%	6.0%
55+	9.0%	8.0%	8.0%	7.0%	6.0%	5.0%

##### Yearly Rates of Employee Termination – Munic. Svc. & Lib.

<u>Age</u>	<u>Years of Service</u>					
	<1	1	2	3	4	5+
20-29	27.0%	25.0%	22.0%	19.0%	17.0%	15.0%
30-39	20.0%	17.0%	15.0%	12.0%	10.0%	6.0%
40-49	15.0%	10.0%	9.0%	7.0%	6.0%	5.0%
50+	8.0%	7.0%	6.0%	5.0%	4.0%	3.0%

##### Prior Valuation:

##### Yearly Rates of Employee Termination

<u>Age</u>	<u>Non-Uniformed</u>	<u>Uniformed</u>
20	10.0%	5.0%
25	7.0%	2.0%
30	5.0%	2.0%
35	4.0%	2.0%
40+	0.0%	0.0%

## Section III

### Actuarial Cost Methods and Assumptions

(continued)

Investment Return: 8.00% per year, net of investment expenses.

Salary Scale: 3% for inflationary salary increases plus a percentage for promotion or merit increases as follows.

#### Yearly Rates of Increases for Promotion or Merit

<u>Age</u>	<u>Police</u>	<u>Fire</u>	<u>Bd of Ed</u>	<u>Munic. Svc. &amp; Lib.</u>
25	6.60%	4.5%	4.40%	6.40%
30	4.80%	2.63%	3.70%	4.78%
35	2.65%	1.25%	3.35%	2.75%
40	1.45%	0.85%	2.50%	2.21%
45	1.10%	0.75%	1.40%	2.00%
50	1.00%	0.75%	0.85%	1.55%
55+	1.00%	0.75%	0.75%	1.25%

#### Prior Valuation:

#### Yearly Rates of Increases for Promotion or Merit

<u>Age</u>	<u>Police</u>	<u>Fire</u>	<u>Bd of Ed</u>	<u>Munic. Svc. &amp; Lib.</u>
25	4.0%	2.5%	4.0%	6.0%
30	3.5%	2.5%	4.0%	4.7%
35	2.2%	1.6%	2.1%	3.1%
40	1.2%	1.1%	1.0%	2.0%
Over 40	1.0%	1.0%	1.0%	2.0%

Salaries are adjusted for groups in negotiations by 3% per year for the period of each open contract, and non-bargaining groups by 3% per year for one full fiscal year from the measurement date. Any wage increases negotiated beyond the valuation date have been reflected in our projections.\*

\* *The following groups have future salary increases that have been negotiated and are reflected in this valuation:*

Firefighters  
HMEA  
CHPEA  
MLA  
Non-union  
School Crossing Guards

For Police, final average pay is loaded by a percentage for assumed private duty and overtime as follows: Pre-7/1/1999 hires: 43%; Post 7/1/1999 hires: 19% (prior valuation: For Police under age 45, overtime limited to less than or equal to 20% of base pay.)

### Section III

#### Actuarial Cost Methods and Assumptions

(continued)

Assumed Retirement Age:

##### Retirement Rates: Police

<u>Service</u>	<u>Age &lt;50</u>	<u>Age &gt;50</u>
20	50.0%	30.0%
21-24	40.0%	25.0%
25-29	30.0%	15.0%
30+	100.0%	100.0%

100% retire at age 65, regardless of service; must be age 40 to retire

##### Retirement Rates: Fire

<u>Age</u>	<u>Years of Service</u>	
	<u>20-24</u>	<u>25-29</u>
45-49	2.5%	5.0%
50-54	5.0%	20.0%
55-59	10.0%	30.0%
60-64	25.0%	40.0%
65+	100.0%	100.0%

100% retire at 30 years of service for all ages

##### Retirement Rates: Board of Education

<u>Age</u>	<u>Rate</u>
55	10.0%
56-57	5.0%
58-61	10.0%
62-64	15.0%
65	40.0%
66-69	15.0%
70	100%

##### Retirement Rates: Municipal Services and Library

<u>Age</u>	<u>&lt;20 yrs svc or</u>	<u>+20 on yrs svc</u>	
	<u>over age 65</u>	<u>Service</u>	<u>and under age 65</u>
55	15.0%	20	15%
56-59	7.5%	21	20%
60-64	15.0%	22	15%
65	30.0%	23-25	10%
66-74	15.0%	26-27	15%
75	100%	28	20%
		29	10%
		30	25%
		31-34	10%
		35	100%

Post 65 rates above used for all years of service.

### Section III

## Actuarial Cost Methods and Assumptions

(continued)

#### Prior Valuation:

##### Retirement Rates:

<u>Service</u>	<u>Police</u>	<u>Fire</u>	<u>Mun. Svc. &amp; Lib.</u>
20	20%	5%	10%
21	15%	1%	5%
22	5%	1%	5%
23	5%	1%	10%
24	20%	10%	15%
25	30%	30%	15%
26-27	5%	5%	10%
28	10%	5%	15%
29	25%	20%	15%
30	100%	20%	100%
31-34	n/a	5%	n/a
35	n/a	100%	n/a

(maximum of age 65)

<u>Age</u>	<u>Bd of Ed</u>
55	15%
56	10%
57-59	5%
60	30%
61	5%
62	20%
63-64	10%
65	100%

For both Uniformed and Non-Uniformed who have reached Assumed Retirement Age, retirement after one year.

#### Social Security:

Future tax wage bases are developed by projecting the 2011 base of \$106,800 forward at 4% per year.

### Section III

#### Actuarial Cost Methods and Assumptions

(continued)

Marital Status at Retirement:

Non-Uniformed:

Males - 80% married, spouse 3 years younger.

Females - 60% married, spouse same age.

Uniformed:

All - 80% married, spouse 2 years younger.

Disability:

Disability benefits were explicitly valued using the DP85 Class 1 Male and Female Disability Incidence Rate Table increased 150% (prior valuation: 300%) for the Police and 250% (prior valuation: 300%) for Firefighter groups, 10% (prior valuation: 200%) for the Board of Education groups and 10% (prior valuation: no increase) for the Municipal Services and Library groups.

*DP85 Class 1 Disability Incidence Table:*

*Sample male and female rates*

<u>Age</u>	<u>Male</u>	<u>Female</u>
15	0.021%	0.023%
20	0.029%	0.030%
25	0.038%	0.047%
30	0.048%	0.080%
35	0.069%	0.136%
40	0.117%	0.211%
45	0.202%	0.323%
50	0.358%	0.533%
55	0.722%	0.952%
60	1.256%	1.159%
65	1.753%	1.358%

Expenses other than  
Investment Expenses:

An explicit dollar amount was included in the development of the normal cost equal to an estimate of expenses (other than investment expenses) for the upcoming year. The estimate was developed based on an average of actual expenses over the last four years. For the 2011 valuation, \$2,538,565 was used. Estimated expenses were then allocated to the various groups by the actuarial accrued liability (prior valuation allocated by present value of future benefits).

## Section III

### Actuarial Cost Methods and Assumptions

(continued)

Sick Exchange: Four years are exchanged by all actives if provision available. For Firefighters hired prior to July 1, 2003, six years are exchanged.

Military and Prior Service  
Buy-backs:

When a decision to buy-back service occurs, date of hire is adjusted accordingly.

Additional Liabilities:

#### COLAs:

Included in this valuation is the liability for the Cost of Living Adjustments (COLAs) effective July 1, 1987, July 1, 1990, July 1, 1997, July 1, 1999, July 1, 2001, July 1, 2005, and July 1, 2007 for both the MERF and the unfunded "Old Plans" (PBF, FRF, and RAF).

#### Local 1716:

Included in this valuation is the obligation for Local 1716 members who transferred to State MERF B on July 1, 1987.

29-year amortization payments (split between the City administration and the pension fund) commenced July 1, 1987 for this obligation. As of July 1, 2011, the City payment will be \$509,126 (\$2,195,000 on a present value basis) and the pension fund payment will be \$462,336 (\$1,994,000 on a present value basis).

#### Local 566:

Included in this valuation is the obligation for Local 566 (included merged Local 1303) members who transferred to State MERF B on August 1, 1988.

30-year amortization payments (split between the City administration and the pension fund) commenced August 1, 1988 for this obligation. As of July 1, 2011, the City payment will be \$303,918 (\$1,886,000 on a present value basis) and the pension fund payment will be \$276,288 (\$1,715,000 on a present value basis).



## Section IV

### Hartford MERF - Summary of Principal Provisions of Pension Plan July 1, 2011

#### PROVISIONS FOR:

##### Retirement Pensions:

Firefighters hired before July 1, 2003: 2.80% of Final Average Pay (rate of weekly pay immediately preceding retirement times 52, plus for firefighters who work a 42 hour week, holiday pay) multiplied by years of service up to 25 plus 2.0% for years over 25.

Firefighters hired after June 30, 2003: 2.5% of Final Average Pay (rate of weekly pay immediately preceding retirement times 52, plus for firefighters who work a 42 hour week, holiday pay) multiplied by years of service up to 20 plus 2% of Final Average Pay for years of service over 20.

Sworn Police Officers hired before July 1, 1999: 2.65% of Final Average Pay for highest 3 of last 5 years multiplied by years of service up to 20 plus 3% for year 21 plus a decreasing percentage for years over 21. Final Average Pay includes a provision for over-time and private duty pay.

Sworn Police Officers hired after June 30, 1999: 2.5% of Final Average Pay for highest 3 of last 5 years times years of service up to 20 plus 2% for years of service- over 20.

#### POLICE OFFICERS AND FIREFIGHTERS

#### BOARD OF EDUCATION MEMBERS

2% (2.5% for HFSHP, HSSSA and HESP) of Final Average Pay for highest 5 of last 10 years times years of service, with maximum benefit of 70% of Final Average Pay. Final Average Pay for HFSHP, HESP, HSSSA, and Local 2221, Hartford Federation of Paraprofessionals are based on highest 3 out of last 5 years. Benefit for Local 2221 is 2.5% of Final Average Pay multiplied by years of service up to 20 plus 2% of Final Average Pay for years of service over 20 (maximum of 10 years).

Effective July 1, 2008 for Local 818, employees hired prior to March 1, 2007 will get 2.5% of Final Average Pay (for each year of service) and employees hired after March 1, 2007 will get 2.0%. Final Average Pay is the highest 3 of the 7 years. Maximum benefit is 70% of pay.

#### MUNICIPAL SERVICES & LIBRARY MEMBERS

For Library and MLA hired on or after July 1, 2006, HMEA hired after July 1, 2003, CHPEA hired after June 23, 2003, 2% of Final Average Pay for highest 2 of last 5 years times years of service with a maximum benefit of 70% of Final Average Pay. For Library with 5-year option, Final Average Pay is highest 5 of last 10 years.

For CHPEA hired on or before June 23, 2003, MLA hired before July 1, 2006, and Nonbargaining, 2.5% of Final Average Pay for highest 2 of last 5 years times years of service. Maximum benefit of 70% of Final Average Pay for CHPEA, 80% for Nonbargaining and MLA. For Nonbargaining with 5-year option, Final Average Pay is highest 5 of last 10 years.

For Nonbargaining municipal employees hired after January 1, 2011, retirement benefit multiplier is reduced to 1.75%.

For HMEA hired before July 1, 2003, 2.75% of Final Average Pay for highest 2 of last 5 years times years of service with a maximum benefit of 75% (was 70%) of Final Average Pay.

For SCGA, 2% of Final Average Pay for highest 5 of last 10 years reduced by 1% of average Social Security covered earnings for all years included in computation of Social Security primary benefits. Maximum benefit of 100% of Final Average Pay.

PROVISIONS FOR:

Retirement Pensions:

POLICE OFFICERS AND FIREFIGHTERS

Non-Sworn Police Officers: 2.5% of Final Average Pay for highest 3 of last 5 years times years of service, with maximum benefit of 80% of Final Average Pay.

Sworn Police Officers have a maximum benefit of 70% of Final Average Pay. For Sworn Police Officers hired before July 1, 1999 increase maximum benefit to 80% of Final Average Pay with sick exchange provision. Firefighters have a maximum benefit of 80% of Final Average Pay (85% with sick exchange if hired prior to July 1, 2003).

Assistant Police Chief, Police Chief, Assistant Fire Chief and Fire Chief: Same as Non-Bargaining.

Normal Form of Benefit:

For unmarried members: life annuity.  
For married members: surviving spouse benefit of 25% of member's final year's earnings, if non-service connected death, and 50% of member's final year's earnings, if service connected death. Minimum of 50% of pension benefit for firefighters for non-service connected death.

For married Non-Sworn Police Officers: life annuity with 50% to survivor.

BOARD OF EDUCATION MEMBERS

For unmarried members: life annuity.  
For married members: life annuity with 50% to survivor.

MUNICIPAL SERVICES & LIBRARY MEMBERS

For unmarried members: life annuity.  
For married members: life annuity with 50% to survivor.

**PROVISIONS FOR:**  
**Normal Retirement Age**  
**and Service Requirement:**

**POLICE OFFICERS AND FIREFIGHTERS**

Firefighters and Sworn Police Officers hired before July 1, 1999: Full benefits after 20 years of continuous service.

Sworn Police Officers hired after June 30, 1999: Full benefits after 25 years of continuous service.

Non-Sworn Police Officers: Full benefits after 20 years of service, or age 60 plus 5 years of continuous service, or after 15 years of service, if contributions are left in the MERF until would have had 20 years of service.

**BOARD OF EDUCATION MEMBERS**

Age 60 plus 10 (5 for non-bargaining – was 10) years of service (continuous service for Local 2221). Members are also eligible at age 55 with 25 years of service.

Local 818 employees hired prior to March 1, 2007 may retire after 20 years of service, regardless of age. For HSSSA, age 55 and 5 (was 10) years of service.

**MUNICIPAL SERVICES & LIBRARY MEMBERS**

For SCGA and MLA hired on or after July 1, 2006, earlier of (1) age 60 plus 5 years of continuous service or (2) age 55 with 25 years of continuous service.

For Nonbargaining and MLA hired prior to July 1, 2006, earlier of (1) age 60 plus 5 years of continuous service or (2) 20 years of service, or (3) after 20 years of service if participant leaves after 15 years of service and contributions are left in the MERF until would have had 20 years of service.

For CHPEA, earlier of (1) age 60 plus 5 years of continuous service or (2) 20 years of aggregate service if hired on or before June 23, 2003, age 55 with 25 years of aggregate service if hired after June 23, 2003.

For HMEA earlier of (1) age 60 plus 5 years of continuous service or (2) 20 years of continuous service if hired before July 1, 2003, age 55 with 25 years of continuous service if hired after July 1, 2003.

For Library non union, earlier of (1) age 60 plus 5 years of continuous service or (2) 25 years of continuous service.

For Library union, (1) age 60 plus 10 years of continuous service or (2) 25 years of continuous service.

For Nonbargaining municipal employees hired after January 1, 2011, earlier of age 55 with 20 years of service and age 62 with 5 years of service.

PROVISIONS FOR:

Optional Early Retirement:

POLICE OFFICERS AND FIREFIGHTERS

Sworn Police Officers: Age 50 with 10 years of continuous service, actuarially reduced for years prior to Normal Retirement Age. Non-Sworn Police Officers: Age 55 with 5 years of continuous service, reduced at 4% per whole year prior to age 60.

Firefighters: Age 50 with 5 years of continuous service, actuarially reduced or reduced at 2% per year (prorated for fractional years) prior to Normal Retirement Age.

Vesting of Earned Deferred Pension:

Sworn Police Officers: After 10 years of continuous service.

Firefighters and Non-Sworn Police Officers: After 5 years of continuous service.

Benefits to Survivors: (Death of Active Member Prior to Retirement)

Surviving Spouse: 25% of final year's earnings (50% if service connected death), payable until death or remarriage. Minimum of 50% of pension benefit for Firefighters for non-service connected death. Surviving Child: \$100 per month for first child, \$50 for each additional child (10% of final year's earnings if service connected death, or 15% if no surviving spouse). Total benefit, including Worker's Compensation, cannot exceed 100% of current pay rate for Member's rank. Non-Sworn Police Officers: Same as General Government members.

BOARD OF EDUCATION MEMBERS

At age 55 with 10 years (5 years for HESP) of service (continuous service for Local 2221), reduced at 4% per whole year prior to age 60. For Local 818, reduction is adjusted for partial years.

MUNICIPAL SERVICES & LIBRARY MEMBERS

For Library union, age 55 with 10 years of continuous service. For all others, age 55 with 5 years of continuous service. Benefit reduced at 4% per whole year prior to age 60 (prorate for partial years for HMEA and CHPEA). For SCG members, reduction is 2% per whole year and fraction of a year prior to age 60.

For Nonbargaining municipal employees hired after January 1, 2011, early retirement reduction is 4% per year prior to age 62.

For Library union, 10 years of continuous service. For all others, 5 years of continuous service. Payments begin no earlier than age 55.

Member must meet qualifications for vesting. Surviving Spouse: 50% of pension which Member is receiving or would be entitled to when retired, payments beginning no earlier than date of Member's 55th birthday. Surviving Spouse benefits are payable until death or remarriage.

PROVISIONS FOR:

Refund of Contributions upon Discontinuance of Employment or at Death (Non-Vested Members): (May be taken in lieu of earned deferred pension by vested members)

Pensions for Permanent, Total Disability - Service Requirements:

POLICE OFFICERS AND FIREFIGHTERS

Refund of total contributions, without interest.

Non-Sworn Police Officers: Same as General Government members.

5 years of continuous service, but no requirement if disability is service connected as defined in Worker's Compensation Act.

Non-Sworn Police Officers: Same as General Government members.

Amount of Total Disability Pension: (Payable so long as total disability continues.)

Retirement Pension with minimum of 25% of "final average pay." If disability is service connected, the pension equals 100% of the Member's final annual pay less Worker's Compensation benefits.

Non-Sworn Police Officers: Same as General Government members.

BOARD OF EDUCATION MEMBERS

Termination: Refund of total contributions, with 3% interest compounded annually.

Death: Refund of total contributions with interest preretirement and without interest postretirement.

10 years of continuous service, except no requirement if disability is service connected as defined in Worker's Compensation Act.

MUNICIPAL SERVICES & LIBRARY MEMBERS

Retirement Pension using Final Average Pay for last 10 years. If disability is service connected, amount not less than 50% of Member's final annual pay at time of disability. Maximum benefit of 2/3 of 10-year Final Average Pay less Social Security benefit. Minimum benefit of \$30 per month. All service connected disability benefits are offset by benefits payable by Worker's Compensation (exception: no offset for \$30 minimum).

If non service connected, same as above, but no 50% Final Average Pay minimum and minimum benefit equals \$10 per month instead of \$30 per month.

**Pensions for Permanent  
Partial Disability:**  
(Where earnings capacity  
is reduced by at least  
10%.)

Ten years of continuous service, but no service requirement if disability is service connected. Same as retirement pension with reduction for less than 15 years of service. If non-service connected, retirement pension, subject to a minimum equal to 25% of Final Average Pay. This minimum is reduced by earnings if less than 15 years of service at time of disability. If service connected, pension equals 50% of final annual pay (regular 20 year pension for Firefighters) if 15 years of service, with reductions for earnings if less than 15 years of service. If at least 20 years of service, pension equals retirement pension.

Non-Sworn Police Officers: Same as General Government members.

10 years of continuous service, except no requirement if disability is service connected as defined in Worker's Compensation Act. Retirement Pension using Final Average Pay for last 10 years (with offset for Worker's Compensation benefits if service-related disability), subject to a minimum pension of \$10 monthly (non-service connected), or \$30 (service connected). If the disability is service connected, benefit not less than 50% of the reduction in earnings with offset for Worker's Compensation benefits. For service connected disability, the maximum benefit is 2/3 of 10 year final average pay less Worker's Compensation and Social Security benefits. For non-service connected disability, the maximum is 2/3 of 10 year final average pay less Social Security benefits, or 1-2/3% of the reduction in income times years of service.

<u>PROVISIONS FOR:</u>	<u>POLICE OFFICERS AND FIREFIGHTERS</u>	<u>BOARD OF EDUCATION MEMBERS</u>	<u>MUNICIPAL SERVICES &amp; LIBRARY MEMBERS</u>
Member's Contribution Rate of Total Earnings: (City pays full balance of costs to fund MERF benefits; also Members and City pay taxes for those covered by Social Security.)	<p>Firefighters and Sworn Police Officers hired before July 1, 1999: 8%.</p> <p>Sworn Police Officers hired after June 30, 1999: 6.5%.</p> <p>Non-Sworn Police Officers: 4% on earnings taxed for Social Security and 7% on excess.</p> <p>Assistant Police Chief, Police Chief, Assistant Fire Chief and Fire Chief: Same as Non-Bargaining.</p>	<p>4% on earnings taxed for Social Security and 7% on excess. For HESP, 9% and 12%, respectively. For HSSSA, 9.25% and 12.25%, respectively (was 8.75%/11.75%). For HFSHP 10.14% and 13.14%, respectively. For Non-bargaining 4.5% and 7.5%, respectively (was 4%/7%).</p> <p>For Local 818, 5.2% up to Social Security Wage Base and 8.2% of the excess. If hired on or after March 1, 2007, 7.1% and 10.1%, respectively.</p>	<p>For Nonbargaining, 5% on earnings taxed by Social Security and 8% on excess if 5 year Final Average Pay option elected (was 4%/7%). With 2 year option, 6% and 9%, respectively (was 5%/8).</p> <p>For Library, 4% on earnings taxed by Social Security and 7% on excess if 5 year Final Average Pay option elected. With 2 year option, 5% and 8%, respectively.</p> <p>For MLA, HMEA hired after July 1, 2003, and CHPEA hired after June 30, 2003, 5% on earnings taxed by Social Security and 8% on excess. For CHPEA hired on or before June 30, 2003, 6.5% and 9.5%, respectively. For HMEA hired before July 1, 2003, 7.8% on all earnings.</p> <p>For SCGA, 4% on earnings taxed by Social Security and 7% on excess (was 3%/6%).</p>

Note 1

Any Member (other than a Police Officer or Firefighter) who was a Member before January 1, 1958 is guaranteed a minimum total benefit, including Social Security based on earnings from the City, equal to the pension the Member would have received under the terms of the MERF plan in existence prior to the enactment of the 1957 Special Act No. 347. Also, several active Members who transferred to MERF on or after July 1, 1968 from the City's Retirement Allowance Fund are entitled to a pension determined by the RAF provisions if it is greater than that based on the MERF provisions.

Note 2

Section 2-166 of the Municipal Code provides a minimum benefit of \$155 monthly for all pensions granted by reason of service or for service-connected disability, and for joint annuitants under elected options, except members for whom Social Security taxes have been paid and anyone for whom more than half of the total pension is paid by the Metropolitan District.

Note 3

All members (other than SCG) may purchase up to 4 years of pension credit for military service. Pension credit is at the following rates of Final Average Pay per year purchased:

HMEA members hired before July 1, 2003 2.75%

Sworn Police Officers, Firefighters, CHPEA members hired on or before June 23, 2003, HFSP, Local 818 hired prior to March 1, 2007, HSSSA, HESP, Non-bargaining (including Assistant Police Chief, Police Chief, Assistant Fire Chief, and Fire Chief), Non-Sworn Police Officers, and MLA hired prior to July 1, 2006 2.50%

Other (including CHPEA members hired after June 23, 2003, HMEA members hired prior to July 1, 2003, MLA hired on or after July 1, 2006, and Local 818 hired on or after March 1, 2007) 2.00%

Note 4

All members (other than Sworn Police Officers hired after July 1, 1999, all Board of Education members, CHPEA hired after June 23, 2003, HMEA hired on or after July 1, 2003, Library, SCG and MLA hired on or after July 1, 2006, Nonbargaining municipal members hired after January 1, 2011) may exchange accumulated sick leave upon retirement for up to 4 years (6 years for Firefighters hired prior to July 1, 2003) of pension service time. Additional pension service time may be purchased from accumulated sick leave at the rate of twenty days of accumulated sick leave for each year of pension service time.

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